



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 648L 1DW648LBEL703126
 Component
Hydraulic System
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0005300	---	---
Sample Date		Client Info		12 Jan 2024	---	---
Machine Age	hrs	Client Info		6863	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

The iron level is abnormal. All other component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		40	---	---
Iron	ppm	ASTM D5185m	>20	▲ 48	---	---
Chromium	ppm	ASTM D5185m	>10	5	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	2	---	---
Lead	ppm	ASTM D5185m	>10	0	---	---
Copper	ppm	ASTM D5185m	>75	2	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

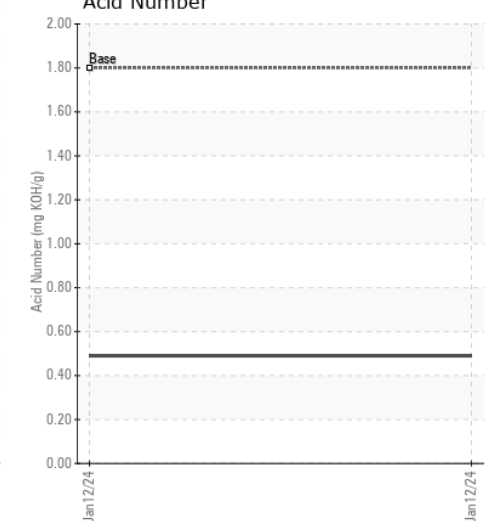
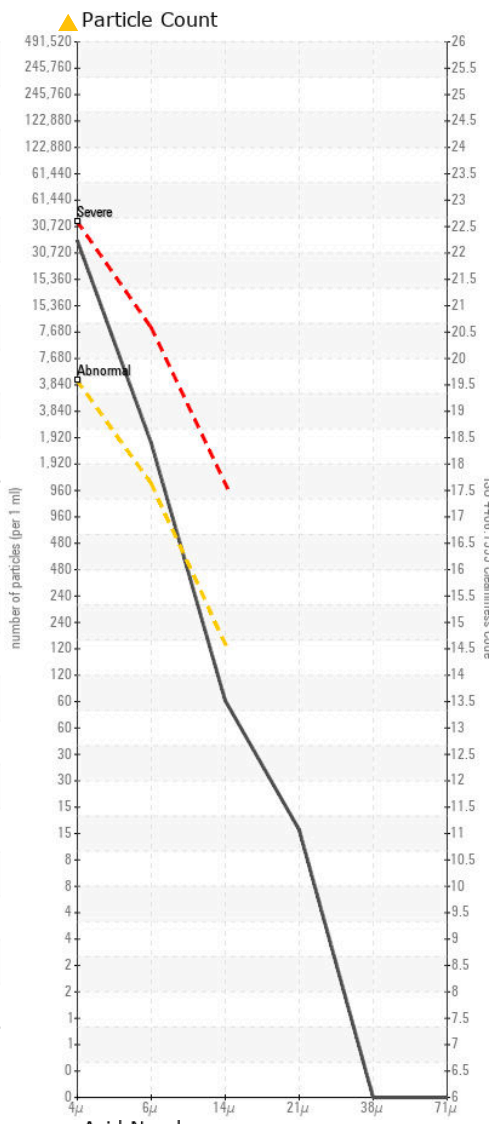
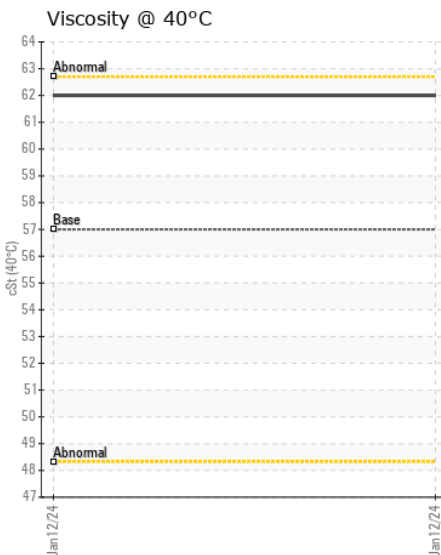
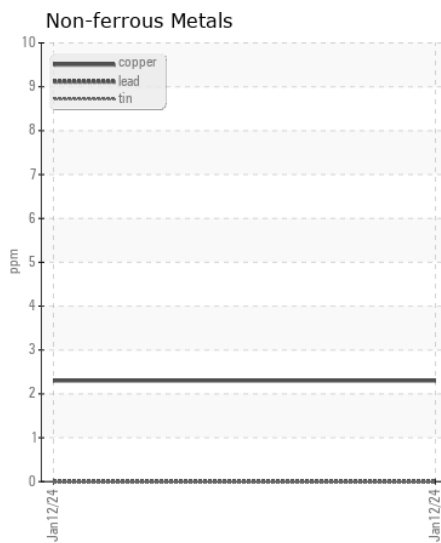
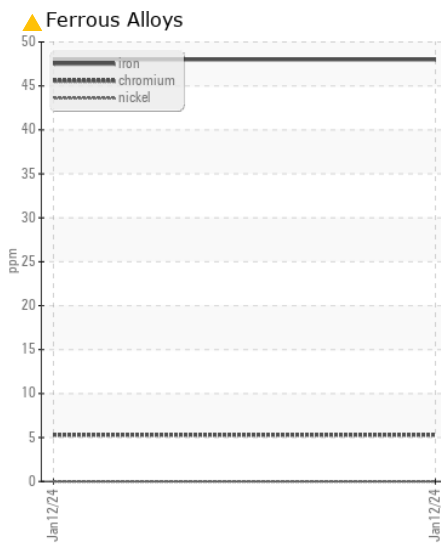
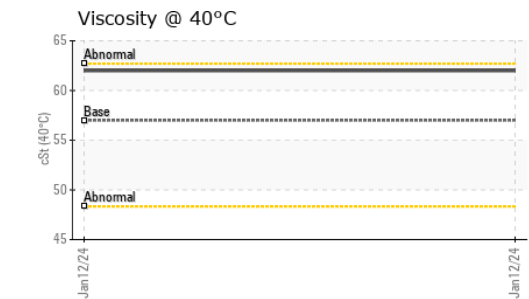
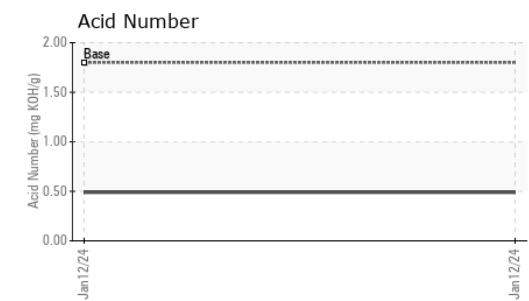
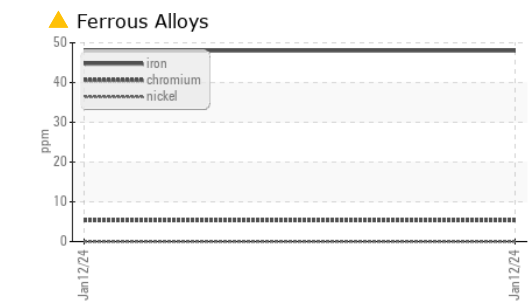
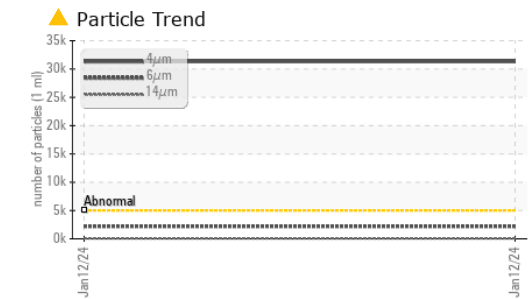
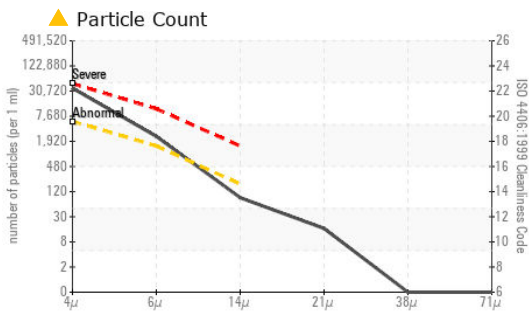
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	4	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 31321	---	---
Particles >6µm		ASTM D7647	>1300	▲ 2208	---	---
Particles >14µm		ASTM D7647	>160	76	---	---
Particles >21µm		ASTM D7647	>40	14	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/18/13	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m	6	0	---	---
Barium	ppm	ASTM D5185m	0	3	---	---
Molybdenum	ppm	ASTM D5185m	0	0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	145	<1	---	---
Calcium	ppm	ASTM D5185m	3570	401	---	---
Phosphorus	ppm	ASTM D5185m	1290	638	---	---
Zinc	ppm	ASTM D5185m	1640	669	---	---
Sulfur	ppm	ASTM D5185m		2361	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	0.49	---	---
Visc @ 40°C	cSt	ASTM D445	57.0	62.0	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WE0005300 Recieved : 17 Jan 2024
 Lab Number : 06063518 Diagnosed : 19 Jan 2024
 Unique Number : 10834900 Diagnostician : Don Baldrige
 Test Package : CONST (Additional Tests: PQ)

WARRIOR TRACTOR AND EQUIPMENT - MONROEVILLE
 66 INDUSTRIAL PARK DR
 MONROEVILLE, AL
 US 36460
 Contact: SCOTT WILLIAMSON
 swilliamson@warriortractor.com
 T: (251)575-7111
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)